

We Claim:

1. A blood processing system comprising  
a blood processing set including a source of  
blood cells, and a blood component collection flow  
5 channel coupled to the source of blood cells including a  
blood cell storage container and an in-line filter to  
remove leukocytes from the blood cells before entering  
the blood cell storage container, the in-line filter  
including a fibrous filter medium, first and second  
10 flexible housings, a unitary, continuous peripheral seal  
formed by application of pressure and radio-frequency  
heating in a single process to join the first and second  
flexible housings to each other, as well as join the  
fibrous filtration medium to the first and second  
15 flexible housings, and  
a pump station adapted to be placed into  
communication with the blood component collection flow  
channel to pump blood into the blood cell storage  
container through the in-line filter.
- 20 2. A blood processing system according to  
claim 1  
further including a fixture to restrain  
expansion of the first and second filter housings as a  
result of pressure applied during operation of the pump  
25 station.
3. A blood processing system according to  
claim 2  
wherein the source of blood cells includes a  
donor flow channel including a blood separation device to  
30 separate blood cells from donor whole blood.
4. A blood processing system according to  
claim 1  
wherein the source of blood cells includes a  
donor flow channel including a blood separation device to  
35 separate blood cells from donor whole blood.

5. A system according to claim 1 or 2 or 3  
or 4

5 wherein the controller includes a function to  
derive a value reflecting volume of blood cells present  
in the blood cell storage container after passage through  
the filter as a percentage of volume of blood cells  
conveyed to the filter.

6. A system according to claim 1 or 2 or 3  
or 4

10 wherein the pump station includes a fluid  
pressure actuated pump and an actuator to apply fluid  
pressure to the pump.

7. A system according to claim 1 or 2 or 3  
or 4

15 wherein the blood cells comprise red blood  
cells.

8. A method of processing blood comprising  
using the blood processing system as defined in claim 1  
or 2 or 3 or 4.

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